| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|----------|------|--|---|---------------------|---------|------------------|
| L1 | 2 | "7296161".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 13:30 |
| L2 | . 5 | (20040059936 20050091497) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 13:30 |
| S1 | 2 | "20040230804" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/12 23:11 |
| S2 | 233 | (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3 near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/12 23:25 |
| S3 | 233 | (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3 near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:09 |
| S4 | 53 | S3 and ((chang\$4 or modif\$5) near3 key) and (key near3 signatur\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:08 |
| S5 | 62 | ("4438824" "4723284" "4807288" "4862501" "4885777" "4885788" "4969189" "5016276" "5018196" "5046094" "5199070").PN. OR ("5396558").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 18:51 |
| S6 | 18 | S5 and (chang\$4 near3 key) | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 18:52 |
| S7 | 3 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3 near4 key) and (key near3 signatur\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:11 |

| S8 | 3 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3 near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:11 |
|-----|-----|--|---|-----|----|------------------|
| S9 | | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3) and (key near3 signatur\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:31 |
| S10 | 2 | "6363480".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:30 |
| S11 | 6 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:31 |
| S12 | 13 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) with signatur\$3) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:38 |
| S13 | 192 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) with key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 20:39 |
| S14 | 12 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) with key) and (key near3 signature). | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 21:06 |
| S15 | 8 | ("4972472" "5404403" "5761306" "5867578" "6745330" "6745331" "6745334").PN. OR ("6782103"). URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 20:42 |
| S16 | 10 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) with key) and (((ic near2 card) or (smart near3 card) or integrat\$4) with signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:17 |
| S17 | 0 | ((GOROMARU near3 HIDEKI) or (HIRATA near3 SHINICHI) or (SUZUKI near3 KATSUHIKO) or (YOSHIDA near3 KAZU)).ap. and (NIPPON).as. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:22 |

| | | 2.10.100.10. | | | | |
|-----|------|---|---|-----|----|------------------|
| S18 | 0 | ((GOROMARU near3 HIDEKI) or (HIRATA near3 SHINICHI) or (SUZUKI near3 KATSUHIKO) or (YOSHIDA near3 KAZU)).ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 21:14 |
| S19 | 2 | "5499294".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 21:21 |
| S20 | 217 | ("4453074" "4670857" "4879747" "5005200" "5027401" "5185794" "5321749").PN. OR ("5499294"). URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 21:24 |
| S21 | 19 | S20 and (chang\$4 near key) | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 21:32 |
| S22 | 1 | "5384846".pn. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 21:28 |
| S23 | 19 | S20 and (chang\$4 near key) and signature | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/13 21:32 |
| S24 | 10 | (chang\$4 near3 key).ab. and (((ic near2 card) or integrat\$4) same key) and (((ic near2 card) or integrat\$4) with signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:18 |
| S25 | . 14 | (chang\$4 near3 key).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) and (((ic near2 card) or (smart near3 card) or integrat\$4) same signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:25 |
| S26 | 17 | (chang\$4 near3 key).clm. and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) and (((ic near2 card) or (smart near3 card) or integrat\$4) same signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:23 |
| S27 | 0 | jp2002244924\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:24 |
| 528 | 0 | jp2244924\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:24 |

| S29 | 0 | jp244924\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:24 |
|------------|-----|--|---|-----|----|------------------|
| S30 | 0 | jp244924-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/13 23:24 |
| S31 | 2 | jp-2002244924-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:58 |
| S32 | 63 | (chang\$4 near3 key) and (((ic near2 card) or (smart near3 card) or integrat\$4) near3 key) and (((ic near2 card) or (smart near3 card) or integrat\$4) near3 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 00:06 |
| S33 | 117 | (Sato near3 Hideo).in. and sony.as. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 17:21 |
| S34 | 15 | S33 and signature key | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 00:07 |
| S35 | 6 | S34 and (key near4 chang\$4) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 17:21 |
| S36 | 0 | ("2004/0019793").URPN. | USPAT | AND | ON | 2007/07/14 17:16 |
| S37 | 3 | ("4399323" "5008818" "5463690"). PN. OR ("7225335").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/07/14 17:17 |
| S38 | 3 | sony.as. and (key near4 chang\$4).ab. and (key and signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 17:23 |
| S39 | 5 | sony.as. and (key near4 chang\$4). clm. and (key and signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 17:24 |

| S40 | 0 | sony.as. and (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) near4 signatur\$3 near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/14 17:25 |
|-----|-----|---|---|-----|----|------------------|
| S41 | 31 | sony.as. and (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) and signatur\$3 and key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 00:18 |
| 542 | 7 | sony.as. and (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) same signatur\$3) and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 00:33 |
| S43 | 16 | (key near4 chang\$4).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) same signatur\$3) and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 12:31 |
| S44 | 2 | JP-2004015598-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 14:58 |
| S45 | 17 | (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) same signatur\$3).ab. and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 00:45 |
| S46 | 431 | (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) same signatur\$3) and (((ic near2 card) or (smart near3 card) or integrat\$4) same key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 00:45 |
| S47 | 68 | (key near4 chang\$4) and (((ic near2 card) or (smart near3 card) or integrat\$4) near3 signatur\$3) and (((ic near2 card) or (smart near3 card) or integrat\$4) near3 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 09:45 |
| S48 | 11 | (5396558 6038551 6782103 5384846 7225335 5446796).pn. | USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 16:39 |
| S49 | 1 | "20040162980" | USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:31 |

| S50 | 2 | "20040162980" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:55 |
|-----|----|---|---|-----|----|------------------|
| S51 | 0 | jp-200124887-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 12:10 |
| S52 | 0 | jp-124887-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:56 |
| S53 | 0 | jp-0124887-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:56 |
| S54 | | jp-200124887-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 12:58 |
| S55 | 2 | "20040076292" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/15 13:06 |
| S56 | 1 | jp-3782038-\$.did. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 12:10 |
| S57 | 20 | (INADA near3 TATSU).in. and (FUJI or XEROX).as. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 12:33 |
| 558 | 2 | "20050033843" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/18 14:58 |
| S59 | 0 | ((GOROMARU near3 HIDEKI) or (HIRATA near3 SHINICHI) or (SUZUKI near3 KATSUHIKO) or (YOSHIDA near3 KAZU)).ap. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:22 |

| S60 _ | 849 | ((GOROMARU near3 HIDEKI) or (HIRATA near3 SHINICHI) or (SUZUKI near3 KATSUHIKO) or (YOSHIDA near3 KAZU)).in. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:23 |
|------------------|-----|---|---|-----|----|------------------|
| S61 | 7 | S60 and (ic near3 card) and (signature and key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:42 |
| S62 | 12 | S60 and (signature and key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:43 |
| S63 | 0 | S60 and (chang\$4 near3 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:43 |
| S64 _. | 0 | S60 and ((chang\$4 or modif\$4) near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:44 |
| S65 | 427 | nippon.as. and ((chang\$4 or modif\$4) near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 15:13 |
| S66 | 175 | nippon.as. and ((chang\$4 or modif\$4) near4 key).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:44 |
| S67 | 0 | S66 and (((ic near card) or (smart near4 card)) near4 key) and (((ic near card) or (smart near4 card)) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:46 |
| S68 | 0 | S66 and (((ic near card) or (smart near4 card)) same key) and (((ic near card) or (smart near4 card)) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 15:14 |
| S69 | 1 | S66 and (((ic near card) or (smart near4 card)) same key) and (((ic near card) or (smart near4 card)) same signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:48 |

| 670 | | CCC 4 (//: | LIC DCDUB | AND | ONI | 2007/07/20 14:48 |
|-----|-------|---|---|-----|-----|------------------|
| S70 | 1 | S66 and (((ic near card) or (smart near4 card)) same signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14.40 |
| S71 | 9 | S66 and ((ic near card) or (smart near4 card)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 14:48 |
| S72 | 39999 | ((chang\$4 or modif\$4) near4 key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ÓN | 2007/07/20 15:15 |
| S73 | . 82 | S72 and (((ic near card) or (smart near4 card)) near4 key) and (((ic near card) or (smart near4 card)) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 15:16 |
| S74 | 8183 | ((chang\$4 or modif\$4) near4 key).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 15:15 |
| S75 | 4 | S74 and (((ic near card) or (smart near4 card)) near4 key) and (((ic near card) or (smart near4 card)) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 15:21 |
| S76 | 15 | S74 and (((ic near card) or (smart near4 card)) same key) and (((ic near card) or (smart near4 card)) same signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 16:41 |
| S77 | 1 | JP10031626 | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 16:40 |
| S78 | 108 | ((KAWAKITA near3 TATSUJIRO) or (KITAJIMA near3 KENJI)).in. and nippon.as. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 16:41 |
| S79 | 34 | S78 and ((ic near card) or (smart near4 card)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/07/20 16:43 |

| S80 | .1 | S79 and (chang\$4 same key) | US-PGPUB; USPAT; EPO; JPO; | AND | ON | 2007/07/20 16:42 |
|-----|----|---|---|-----|------|------------------|
| | | | DERWENT; IBM_TDB | | | |
| S81 | 2 | "20040230804" | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:24 |
| S82 | 0 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) near3 key near3 (new or second) near4 signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:29 |
| S83 | 0 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) near3 key near3 (new or second or special) near4 signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:30 |
| S84 | 5 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) near3 key near3 (new or second or special) near4 signature).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:35 |
| S85 | 65 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) near3 key near3 (new or second or special) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:35 |
| S86 | 60 | S85 and (chang\$4 and key and digital and signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON . | 2008/01/24 11:36 |
| S87 | 2 | S85 and (chang\$4 and key and digital and signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:57 |
| S88 | 3 | S85 and (chang\$4 and key and signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 11:58 |
| S89 | 65 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) near3 key near3 (new or second or special) near4 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:28 |

| S90 | 3 | S89 and (chang\$4 and key and signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:15 |
|-----|-----|---|---|-----|----|------------------|
| S91 | 7 | (chang\$4 and key and digital signature).ab. (ic near3 card) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:03 |
| S92 | 19 | (AKI or AKIRA or AKASHI or WAKAO). in. and canon.as. and (chang\$4 and key and digital and signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:10 |
| S93 | 2 | (AKI or AKIRA or AKASHI or WAKAO). in. and canon.as. and (chang\$4 and key and digital and signature).clm. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:13 |
| S94 | 2 | "5875249".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:13 |
| S95 | 4 | S89 and ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:19 |
| S96 | 580 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:20 |
| S97 | 218 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and (digital near4 signature)).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:20 |
| S98 | 48 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and (digital near4 signature)).ab. and ("713"/\$.ccls. or "380"/\$.ccls. or "726"/\$.ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:29 |
| S99 | 4 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and (digital near4 signature)).ab. and ("713"/\$.ccls. or "380"/\$.ccls. or "726"/\$.ccls.) and (ic near3 card) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 12:28 |

| | _ | | 110 005::5 | | | 2000/04/24 14:02 |
|----------|------|---|---|-----|----|------------------|
| S10 0 | 48 | ((chang\$4 or convert\$4 or vary\$4 or modif\$4 or alter\$4 or replac\$4) and key and (digital near4 signature)).ab. and ("713"/\$.ccls. or "380"/\$.ccls. or "726"/\$.ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 14:02 |
| S10 1 | 27 | (chang\$4 near3 key).ab. and ((digital near3 signature) same key) and ("713"/\$.ccls. or "380"/\$.ccls. or "726"/\$.ccls.) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 14:39 |
| S10 2 | 1 | (chang\$4 near3 key near3 digital near3 signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 14:40 |
| S10 3 | 4 | (chang\$4 near3 key near3 digital near3 signature).bsum. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 14:41 |
| S10 4 | 22 | (chang\$4 near3 key near3 digital near3 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 15:38 |
| S10 5 | 1929 | (hirata or akashika).in. and nippon.as. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 15:30 |
| S10 6 | 6 | (hirata or akashika).in. and nippon.as. and (signature and (ic near3 card) and key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 11:01 |
| S10 7 | 109 | ((chang\$4 or new) near3 key near3 digital near3 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 16:39 |
| S10 8 | 7 | ((chang\$4 or new) near3 key near3 digital near3 signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/24 15:45 |
| S10 9 | 14 | S107 and ((chang\$4 or new) same key same digital same signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 09:59 |

| S11 0 | 22 | ((chang\$4 or new) near3 key near3 digital near3 signature) and (ic near4 card) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:01 |
|----------|----|---|---|-----|----|------------------|
| S11 1 | | "7058804".pn. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 09:54 |
| S11 2 | 3 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:00 |
| S11 3 | 0 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature same goal).ab. | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:00 |
| S11 4 | 0 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and (ic near4 card) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:02 |
| S11 5 | 3 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:02 |
| S11 6 | 1 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and card | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:03 |
| S11 7 | 1 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and card (signature and key and (new or chang\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:13 |
| S11 8 | | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and (signature and key and (new or chang\$4)) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 10:14 |

| S11 9 | 2 | (6463155 7234060 6978017).pn. and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and (signature and key and (new or chang\$4)) | USPAT | AND | ON | 2008/01/25 10:20 |
|----------|----|--|---|-------|----|------------------|
| S12 0 | 0 | "20030002679" and ((chang\$4 or new) same key same digital same signature).ab. and ((chang\$4 or new) near3 key near3 digital near3 signature) and (signature and key and (new or chang\$4)) | US-PGPUB | AND . | ON | 2008/01/25 10:20 |
| S12 1 | 0 | "20030002679" and ((chang\$4 or new) same key same digital same signature).ab. and (signature and key and (new or chang\$4)) | US-PGPUB | AND | ON | 2008/01/25 10:20 |
| S12 2 | 1 | "20030002679" and ((chang\$4 or new) near3 key near3 digital near3 signature) and (signature and key and (new or chang\$4)) | US-PGPUB | AND | ON | 2008/01/25 10:22 |
| S12 3 | 1 | "20030002679" and ((chang\$4 or new) near3 key near3 digital near3 signature) | US-PGPUB | AND | ON | 2008/01/25 10:22 |
| S12 4 | 1 | "6463155".pn. and ((chang\$4 or new) near3 key near3 digital near3 signature) | USPAT | AND | ON | 2008/01/25 10:22 |
| S12 5 | 11 | (hirata or akashika).in. and nippon.as. and (signature and key) | US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/01/25 13:29 |